

OF THE WEEK

pioneer arrives at jupiter	356
energy: a change of czars	357
noncosmological redshifts	358
noncontagion of cancer	358
looking at a hepatitis virus	359
wood versus oil: a correction	359
soviet moon robot	359

RESEARCH NOTES

zoological sciences	360
earth sciences	360
biomedical sciences	361
environmental sciences	361

ARTICLES

bronowski's 'ascent of man'	
the man and his science	362
an interview with bronowski	364

DEPARTMENTS

letters	355
books	367

COVER: Scientist-philosopher Jacob Bronowski and two BBC television film crews journeyed to 27 countries in the preparation of the series "The Ascent of Man." The programs survey human history as recorded in the intellectual achievements that shaped cultural evolution. See pp. 362 and 364. (Photo: Bronowski at Sultaniyeh in Iran/BBC-TV)

Publisher	E. G. Sherburne Jr.
Editor	Kendrick Frazier
Senior Editor and Physical Sciences	Dietrick E. Thomsen
Senior Editor and Behavioral Sciences	Robert J. Trotter
Biological Sciences	Joan Arehart-Treichel
Science and Society	John H. Douglas
Space Sciences	Jonathan Eberhart
Writer/Copy Editor	Lisa J. Shawver
Assistant to the Editor	Esther Gilgoff
Production Manager	Davida Daemon
Books	Margit Friedrich
Circulation Manager	Lawrence Cope
Advertising	Scherago Associates, Inc. 11 W. 42nd St., New York, N.Y. 10036 Fred W. Dieffenbach Sales Director

Copyright © 1973 by Science Service, Inc.,
1719 N St., N.W., Washington, D.C. 20036.
Republication of any portion of SCIENCE NEWS
is strictly prohibited.

Subscription Department
231 West Center Street
Marion, Ohio 43302

Subscription rate: 1 yr., \$10; 2 yrs., \$18; 3 yrs.,
\$25. (Add \$2 a year for Canada and Mexico, \$3
for all other countries.) Change of address:
Four to six weeks' notice is required. Please
state exactly how magazine is to be addressed.
Include zip code.

Printed in U.S.A. Second class postage paid at
Washington, D.C. Established as Science News
Letter® in mimeograph form March 13, 1922.
Title registered as trademark U.S. and Cana-
dian Patent Offices.

Published every Saturday by SCIENCE SER-
VICE, Inc., 1719 N St., N.W., Washington, D.C.
20036. (202-785-2255). Cable SCIENSERV.

december 8, 1973

to the editor

A peregrine sighting

In a recent environmental science note the statement is made that the American peregrine falcon is almost gone and that "no peregrines in the wild are left east of the Rockies" (SN: 11/10/73, p. 295).

On Oct. 5, 6 and 7 at Block Island, R.I., four peregrine falcons were observed by persons attending the Block Island weekend conducted by the Audubon Society of Rhode Island.

Lewis E. Dickinson
Past President of the Audubon Society
of Rhode Island
Barrington, R.I.

Physics for nonscientists

I was very surprised by some of the comments made by Senior Editor Dietrick E. Thomsen in the off-the-beat article "Physics is as physics does" (SN: 11/3/73, p. 284). He starts out in his first sentence, "The recent survey that shows (again) that students dislike physics and physicists. . . ." The article he was commenting on (SN: 10/13/73, p. 230) didn't simply show that students in a survey disliked physics and physicists, but what it did state was that between 1950 and 1970 the percentage of high-school students taking physics dropped from about 25 percent to less than 20 percent. The authors concluded that relating physics to people by stressing historical and philosophical ideas, as in the Harvard Project Physics, seemed to offer the best chance of countering this trend. It seems to me this is a situation well worth countering. The fact that students are turning their back on physics in high school has deeper implications than merely the willingness of young voters and taxpayers to support scientific research. In a democratic society in which the public is assuming, if not an increasing role, an increasing voice, in the technological application of science, such as in oil pipelines, clearcutting, supersonic transports, strip mining, space exploration, nuclear power plants, etc., it is essential that, not only future voters and taxpayers, but also future politicians, teachers, journalists and businessmen have some exposure to the basic laws of the physical sciences.

High school is not the place for specialization and departmentalism. Nor is it the place to cultivate only those well talented

in mathematics and keenly interested in higher physics, and weed out the nonscientists from the natural sciences. Otherwise, we cannot hope to prevent illogical arguments and emotionalism from influencing public decision on government projects, and student interest often turning to pseudo-science and magical-fantasy theories.

Paul A. Zerzan
Portland, Ore.

Twice a week?

SCIENCE NEWS is the greatest. I wish it came out twice a week. It's that interesting.

I liked your article on the X-24B lifting body. I only wish you had published photos of the X-24A, as its description suggests it could be taken for a UFO, quite easily. I also liked the article on: "The Supercritical Wing." I wonder if its advantages could be applied to boat hydrofoils.

Robert Schiller
Denmark, Wis.

'Scrubbing' volcanic gas

In response to the item on "Sulfur dioxide from volcanoes" (SN: 11/17/73, p. 314), and in line with national pollution control goals, I urge readers to write to their Congressmen asking that emission "scrubbers" be placed on the South American volcanoes indicated. By listing the "scrubbers" as a foreign aid appropriation, Kissinger's program for betterment of relations with our southern neighbors can be accelerated at the same time as our domestic atmospheric SO₂ concentration is reduced by stopping the 10 percent emitted in South America from drifting north across the equator.

Carl Mason
Rahway, N.J.

Natural resources

I have recently subscribed to SCIENCE NEWS. I would like to compliment you on the publication. The cover on the Oct. 27 issue was especially gratifying to see. Depiction of natural resources is an excellent means of communication.

Bernard L. Berger
Fish and Wildlife Service
U.S. Department of the Interior
Washington, D.C.

*Address communications to Editor,
Science News, 1719 N Street, N.W.
Washington, D. C. 20036*

SCIENCE SERVICE

Institution for the Popularization of Science founded 1921; a nonprofit corporation

Board of Trustees—Nominated by the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: **Athelstan Spilhaus**, Woodrow Wilson International Center for Scholars; **Deborah Partridge Wolfe**, Queens College of City University of New York; **Bowen C. Dees**, The Franklin Institute. Nominated by the NATIONAL ACADEMY OF SCIENCES: **Frederick Seitz**, Rockefeller University; **Gerald F. Tape**, Associated Universities; **Allen V. Astin**, National Academy of Sciences. Nominated by the NATIONAL RESEARCH COUNCIL: **Glenn T. Seaborg** (President), University of California, Berkeley; **Gerald Holton**, Harvard University; **Joseph W. Berg Jr.**, National Research Council. Nominated by the JOURNALISTIC PROFESSION: **O. W. Riegel** (Secretary), Washington and Lee University; **Norman Cousins**, "World"; **Julius Duscha**, Washington Journalism Center. Nominated by the E. W. SCRIPPS TRUST: **John Troan**, Pittsburgh Press; **Milton Harris** (Treasurer), Washington, D.C.; **Edward W. Scripps II** (Vice President and Chairman of the Executive Committee), Edward W. Scripps Trust.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donad R. Harless; Things of Science: Ruby Yoshioka.